

## United States Patent and Trademark Office



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

	APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
	10/074,003	02/14/2002	Warren Stuart Crippen	2207/12663	6656
	7590 10/20/2004			EXAMINER	
Blakely Sokoff Taylor & Zafman 12400 Wilshire Boulevard				PATEL, ISHWARBHAI B	
Seventh floor		Doulevard		ART UNIT	PAPER NUMBER
	Los Angeles, CA 90025			2841	

DATE MAILED: 10/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

*	Application No.	Applicant(s)	
Advisory Action	10/074,003	CRIPPEN, WARRE	N STUART
Advisory Addon	Examiner	Art Unit	
. ·	Ishwar (l. B.) Patel	2841	
The MAILING DATE of this communication appe	ars on the cover sheet with the	correspondence add	ress
THE REPLY FILED 28 September 2004 FAILS TO PLACE Therefore, further action by the applicant is required to average final rejection under 37 CFR 1.113 may only be either: (1) condition for allowance; (2) a timely filed Notice of Appeal Examination (RCE) in compliance with 37 CFR 1.114.	oid abandonment of this applic ) a timely filed amendment whic	ation. A proper reply th places the applica	y to a . Ition in
PERIOD FOR RE	PLY [check either a) or b)]		
a) The period for reply expires 3 months from the mailing date b) The period for reply expires on: (1) the mailing date of this A no event, however, will the statutory period for reply expire I ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS 706.07(f).  Extensions of time may be obtained under 37 CFR 1.136(a). The fee have been filed is the date for purposes of determining the period of fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of (2) as set forth in (b) above, if checked. Any reply received by the Offic timely filed, may reduce any earned patent term adjustment. See 37 C	Advisory Action, or (2) the date set forth ater than SIX MONTHS from the mailing FILED WITHIN TWO MONTHS OF TO date on which the petition under 37 CF of extension and the corresponding amount the shortened statutory period for reply ce later than three months after the ma	ng date of the final rejection.  HE FINAL REJECTION.  FR 1.136(a) and the appropunt of the fee. The appropriation of the final originally set in the final	on. See MPEP opriate extension ropriate extension Office action; or
1. A Notice of Appeal was filed on Appellant's 37 CFR 1.192(a), or any extension thereof (37 CFF			
2. $\square$ The proposed amendment(s) will not be entered be	ecause:	•	
(a)   they raise new issues that would require further	er consideration and/or search (	see NOTE below);	
(b)  they raise the issue of new matter (see Note b	elow);		
<ul><li>(c)  they are not deemed to place the application in issues for appeal; and/or</li></ul>	n better form for appeal by mate	erially reducing or sir	nplifying the
(d)  they present additional claims without cancell	ng a corresponding number of f	inally rejected claim	s.
NOTE:			
3. Applicant's reply has overcome the following reject	ion(s):		
4. Newly proposed or amended claim(s) would canceling the non-allowable claim(s).	be allowable if submitted in a se	eparate, timely filed	amendment
<ul> <li>5. ☐ The a) ☐ affidavit, b) ☐ exhibit, or c) ☐ required required required representation in condition for allowance becaused by the Examiner in the final rejection.</li> </ul>	ecause: See Continuation Sheet.		
7. For purposes of Appeal, the proposed amendment explanation of how the new or amended claims we			and an
The status of the claim(s) is (or will be) as follows:			
Claim(s) allowed:			
Claim(s) objected to:			
Claim(s) rejected: 10-17.			
Claim(s) withdrawn from consideration:			
8. The drawing correction filed on is a) appr	roved or b) disapproved by t	the Examiner.	
9. Note the attached Information Disclosure Statemer  10. Other:		CAMAND CUNED	
		TECHNOLOGY CENTER	

Continuation of 5. does NOT place the application in condition for allowance because: Applicant's argument Van Pham et al., disclose neither the function nor the structure of a space transformer and is not designed to convert a micro pitch scale to a micro pitch scale, is not found persuasive. First, these are the structural claims and prior art is applied to the structure and not to the function. Further, surface 14, figure 3A and 4, is for connecting to the semiconductor die 50 and surface 16, figure 3B and 4, is for connecting to a substrate 70, which shows that the structure of Van Pham et al., is converting the spacing of pad, pitch on one suitable to a die to that on the other side suitable to substrate. Applicant further argues that in figure 4 of Van Pham et al., the contacts and spacing on the die side (arguably corresponding semiconductor side contact) having dimensions and spacing that are in fact larger (see space between contact 18) than the dimensions and spacing on the other side (in this case the substrate side), is not correct. Contrary to that it is explained in figure 3A, die side and figure 3B, substrate side, column 3, line 50-65, that pads 20 on the surface side 16, are arranged across the entire area of the bonding surface 16 and provides a much larger area within which the pads may be distributed than is the case with using only a narrow perimeter area on surface 14, die side, for pads 18, resulting bonding pads 20, figure 3B, appreciably large than contact pads 18, figure 3A. The prior art of Eldridge was used to have a further evidence of specific pitch dimensions on die side and the substrate side.